3-11-2010

DDASaccident645

Humanitarian Demining Accident and Incident Database
AID

DDAS Accident Report

Accident details

Report date:	05/03/2011	**Accident number:**	645
Accident time:	08:04	**Accident Date:**	11/03/2010
Where it occurred:	MF. 477, JABIR 1, Sector East, Jabir, Mafraq Region	**Country:**	Jordan
Primary cause:	Field control inadequacy (?)	**Secondary cause:**	Unavoidable (?)
Class:	Excavation accident	**Date of main report:**	Not recorded
ID original source:	None	**Name of source:**	Demining group
Organisation:	**[Name removed]**		
Mine/device:	M14 AP blast	**Ground condition:**	grass/grazing area hard
Date record created:		**Date last modified:**	05/03/2011
No of victims:	1	**No of documents:**	2

Map details

Longitude:		**Latitude:**	
Alt. coord. system:		**Coordinates fixed by:**	
Map east:	36.24500 E	**Map north:**	32.49360 N
Map scale:		**Map series:**	
Map edition:		**Map sheet:**	
Map name:			

Accident Notes

no independent investigation available (?)

standing to excavate (?)

use of rake (?)

non injurious accident (?)

long handtool may have reduced injury (?)

Accident report

A PDF report of this accident was made available by the demining group involved in late 2010. Its conversion into a DDAS file has led to some of the original formatting being lost. Text in square brackets [ ] is editorial.

The internal investigation report is reproduced below, edited for anonymity.

INCIDENT INVESTIGATION FOR [Demining group] - MINE ACTION TEAM - JORDAN

TASK NAME: JABIR 1 (477), NORTH BORDER PROJECT, EAST SECTOR

GRID REF: 32.49360 N: 36.24500 E

MINEFIELD NO: - 477, MINEFIELD TASK ID: - JABIR 1, SECTOR:- EAST,

INVESTIGATION CONDUCTED BY – [Name removed]

DEMINER: [the Victim]; DATE OF BIRTH: 1/1/1971. NIC NO (ID NUMBER):: [Removed]

TEAM LEADER: [Name removed]

TIME OF INCIDENT: 08:04 HOURS, DATE OF INCIDENT: 11 MAR 2010

NATURE OF INJURY: NO INJURY. TYPE OF MINE: Anti Personal M14

IMSMA DETAILED REPORT FOR MINE INCIDENT Thursday, 11 Mar 2010,

Part 1 — Description of the incident

1. Organisation name: [Demining group], JORDAN Team No: Kilo

2. Incident date: 11 Mar 2010; Time: 08:04 hours

3. Location of incident: East Sector: Province: Mafraq: Village: Jabir; Project or task No: Jabir 1

4.Name of site manager or team leader: [Name removed]

5. Type of incident: M14 AP Mine, uncontrolled detonation of a mine/UXO

6. Device was detonated by: Deminer

7. a. Device detonated while: Raking with Heavy Rake.

8. Device was found in an area classified as: a known hazardous area

9. Narrative (Describe how the incident happened. Attach additional pages and photographs or diagrams to assist in clarifying the circumstances surrounding the incident): During the recovery of AP mine deminer hit the mine with the heavy Rake which initiate the mine and caused the incident.

Part 2 – Injuries

10. Did the incident result in any injuries? No.

11. List people injured and nature of injury: [None].

Part 3 – Equipment damages

12. Did the incident result in any damage to equipment or property? No.

13. List any mine action equipment or property damage: [None].

14. List damage to equipment or property owned by a member of the public or the government. [None].

Part 4 – Explosive hazard

15. Provide details of mines/UXO/ other devices that were involved in the incident.

Device Type: Method: Determined by:

AP (Blast) Mine Buried Raking

16. State specific device (if known): Anti-Personal Mine, 01, M14

17. Comments (include measurements of any crater resulting from the explosion)

Crater Depth: approx. / Width: approx. There was no crater

Part 5 - Site conditions

18. Describe the conditions at the site at time of the incident:

Medium hard, flat medium density grassland.

Weather was clear and mild.

Part 6 – Team and task details

20. Qualifications of Member(s) involved in the incident:

Name Position in Location Occupation

[Name removed] Deminer Kilo

21. How long had this team been?

a. At this site? 2 Months.

b. working on this task? 2 Months

c. working on the day? 1 Hours & 04 minutes

22. Detector type: F3; Serial No.: 16234; Detector status: Functional: Tripwire feeler used? No

23. Hand tool: HEAVY RAKE

24. PPE: Vest, Visor

25. Comments: [None]

Part 7 - Medical & First Aid

Medical treatment required: No.

26. Medical Support at Incident Site: Medic, 1st Aid Kit, Stretcher, Ambulance, Safety Vehicle, Radio to call forward medic.

27. Was a Mine Incident Drill carried out? Yes.

28. Time and distance data

a. Time from incident to SECTION MEDICAL POINT (2) minutes

b. Time spent at site administering treatment: (3) minutes

c. Time from evacuation FROM to arrival King Abdullah Hospital: Not Applicable

Part 8 – Reporting procedures

Reported by: [Name removed], [Demining group] Jaber Office to: [Demining group] Offices & NCDR

Investigation conducted by: [Name removed]

Report compiled/translated by: [Name removed], [Name removed]

Verified by: [Name removed]

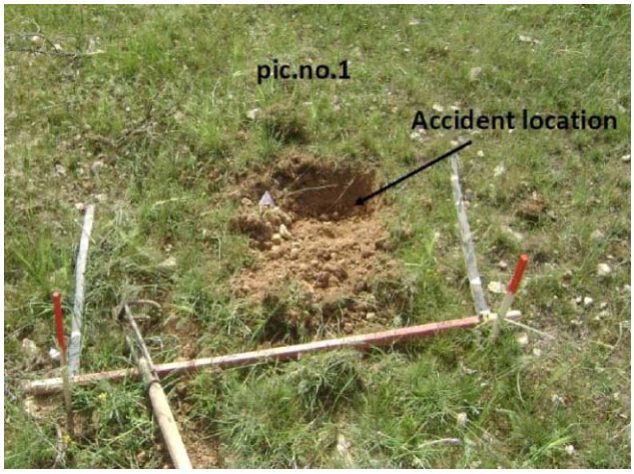
Findings

An M14 anti-personal Mine blast incident occurred to the deminer [the Victim] from “Kilo” team in Thursday 11th of March 2010 at 08:04 hours in the Turning point 3 from the mine field number 477 Jabir 1 task. Grids: N: 32.49360, E: 36.24500

Findings by the investigating officer

1. The deminer didn’t carried out the visual check it was found there was stones in the clearance box.

2. He didn’t apply the correct procedures in cutting the grass and removing stones according to the SOPs.



3. The base stick is placed in the right place and marked.

4. The deminer searched and carried out the raking for the signal outside the clearance box area.

5. The marking pickets are put according to the SOP.

6. No damage found in the heavy rake.

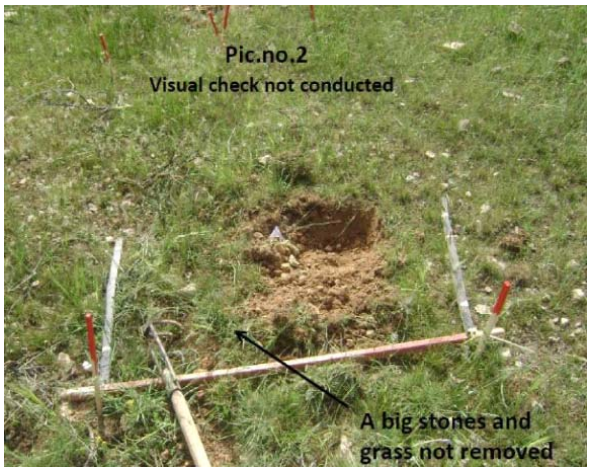
7. Raking depth was 11 cm which is less than the required depth.

8. The deminer buried the grass on his left side near to the cluster where he is working at instead of putting them in the rubbish pit it is violation of the SOPs.

9. He didn’t use the light rake.

10. According to the medic who was watching when the accident happen it was a strong explosion followed by lots of dust.

11. There was no crater found after the mine blast which means that the mine was almost on surface or semi surface.



Observation and Recommendation of Operations Manager

The deminer has not followed the correct drill. Using heavy rake in grass area is always risky due to the roots and due care should be taken. This incident happened due to the deminer individual mistake.

It is recommended to issue a written warning order to the deminer.

[Name removed] Operations Manager Date: 17 Mar 2010

Attachments:

Statements by Injured Members

Statements by Witnesses

Photographs of Injuries

Photographs of Incident Site

Copy of Incident Report

Victim Report

Victim number: 828

Name: [Name removed]

Age: 39

Gender: Male

Status: deminer

Fit for work: yes

Compensation: N/A

Time to hospital: N/A

Protection issued: Frontal apron
Mask Visor
blast boots

Protection used: Frontal apron, Mask visor, blast boots

Summary of injuries:

COMMENT: No medical report was made available. Photographs of the Victim showed no injuries.

Statements

Statement 1: [the Victim]

When we arrived to the site the team leader gave us the morning safety brief and he warned us to be very alert about as we work on mine clusters, at 07:30 am I entered my site and the team leader came to direct me to make more space in the clearing area of missing mines, he told me to move to lane one later after finishing my work at the missing mine, lane one is a mixed mine area(has both types of mines M15 and M14) and asked me to clear M14 mines because the anti tank mines are already cleared, I took my tools and went to that direction, when I arrived I started to clear a cluster. I was working on 9 o'clock mine from the inner row and I put the measuring ruler, I checked the first box but no signal appeared then I moved the ruler to the front to clear the other box and I found a signal I pointed it, I put the triangle marker and started raking to reach the signal and while am progressing toward the signal using the heavy rake the accident happened , I walked out of the field on my feet.

A: Yes, I was wearing all the protection tasks while working.

A: Yes, I made the eye test before started working.

A: Yes, I removed all the stones and grass inside the clearing box.

A: Yes, I made all the right procedures in pointing the clusters I worked at.

Statement 2: Team Leader

I gave the team the safety brief at the beginning of the working day as we work in the main lanes area and warned them in dealing with missing mines, at 07:30 am they started working and I started checking on their work, the injured was the first one to start with, I explained to him how to know the right measures in searching according to the SOP as he was working on a cluster has missing AP mine. I left him and told him to go to another cluster in lane one doesn't have a missing mine, I went to another deminer in lane 9 from task Jaber 1 and then checked on another who works at the same site, then I heard a sound of explosion at 08:05 am from the 1st deminer site, immediately I went to him and informed the medic and sector coordinator [Name removed] about the accident when I arrived there the injured was walking out the field.

A: Yes, he works on areas wasn't cleared yet.

A: Yes, he was following the right procedures according to SOP in clearing.

A: Yes, I informed the team about the right way in cutting grass and removing stones. A: Yes, I saw lots of stones in the clearing area.

A: Yes, the de-miner was searching for the mine since yesterday and he completed the mission the day the accident happened according to the SOP.

A: Yes, the accident happened in the cluster box.

A: Yes, I saw the index triangle in the working area.

Statement 3: Witness Deminer

At 08:00 am I prepared the work tools to move from lane 4 to the main task and when I was putting the pointing picket in the bucket I heard a sound of explosion I turned east to see a

deminer standing then turned west to see the injured standing and moving back, I shouted to tell about the accident and went to him to find him getting out of the field by himself.

A: Yes, the team leader gave us the safety brief in the morning.

A: No, there were no injuries on the deminer.

A: Yes, he was wearing all his protection tasks while working. A: Yes, the safe distance between us was according to the SOP.

Statement 4: Medic

At 08:04 am while am watching the deminers I heard a strong sound of explosion from the right side east direction from kilo team site and I saw dust when I was informed about an accident from the team leader I arrived there to find the deminer walking out of the field I checked him he was in a good condition and wasn't evacuated to the hospital. I kept him on the ambulance for two hours for observation and the QC team came and took some pictures for him and went to the accident site.

A: Yes, it was a strong sound of the explosion.

A: he has some hearing for two hours but then its gone.

A: Yes, he said he saw a part of upside-down mine covered with a thin layer of dust about 2 cm layers according to what he said.

Analysis

The primary cause of this accident is listed as a *Field Control Inadequacy* because the investigators found that the Victim was not working to his SOP and his errors were not corrected. The secondary cause is listed as *Unavoidable* because the small mine appears to have been on the surface and rendered "invisible" by dust. The method of excavation with a long-handled rake keeps the deminer a safer distance from an initiation, but the distance also makes it harder for him to see things on the ground. The controlled use of these rakes in this demining group's raking procedure *may* increase the chance of an unintended initiation, but the accident record shows that the distance between the AP blast and the deminer prevents serious injury in all instances where the procedure is correctly applied.

It is strange that the Operations Manager recommended that the Victim be given a written warning for breach of SOPs, but did not recommend warning his Team Leader who failed to ensure that the Victim was working correctly.

The demining group's concern to investigate and share accident reports indicates a commendable professionalism.